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- (71) 出願人 (米国を除く全ての指定国について): 株式会社アイエス (AIES CO., LTD.) [JP/JP]; 〒105-0001 東京都港区虎ノ門 1 丁目 1 番 1 号 Tokyo (JP).
- (72) 発明者; および
- (75) 発明者/出願人 (米国についてのみ): 稲田 修司 (IN-ADA, Shuji) [JP/JP]; 〒105-0002 東京都港区愛宕 2 丁目 3 番 1 号 Tokyo (JP). 佐藤 菊智 (SATO, Kikuchi) [JP/JP]; 〒720-2411 広島県福山市加茂町中野 3 丁目 6 番地 Hiroshima (JP).
- (74) 代理人: 大島 正孝 (OHSHIMA, Masataka); 〒160-0004 東京都新宿区四谷四丁目 3 番地 福屋ビル 大島特許事務所 Tokyo (JP).
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— 国際調査報告書
- 2 文字コード及び他の略語については、定期発行される各 PCT ガゼットの巻頭に掲載されている「コードと略語のガイダンスノート」を参照。

(54) Title: POLYETHYLENE TEREPHTHALATE FOR MOLDING AND PROCESS FOR PRODUCING THE SAME

(54) 発明の名称: 成形用ポリエチレンテレフタレートおよびその製造方法

(57) Abstract: A process for producing polyethylene terephthalate for molding which has a reduced cyclic trimer content. The process for producing polyethylene terephthalate for molding comprises (1) a condensation step in which bis(2-hydroxyethyl) terephthalate having an ion content of 10 ppm or lower and an acid value of 30 mg-KOH/g or lower is condensed to form an oligomer having an average degree of polymerization of 4 to 10, (2) a melt polymerization step in which the oligomer is melt-polymerized to obtain a prepolymer having an intrinsic viscosity of 0.50 to 0.65, and (3) a solid-phase polymerization step in which pellets of the prepolymer are crystallized and then polymerized at 190 to 230°C by solid-phase polymerization to produce polyethylene terephthalate having an intrinsic viscosity of 0.65 or higher. Also provided is polyethylene terephthalate for molding which has been obtained by the process and has specific properties.

(57) 要約: 本発明は、環状三量体の含有量の少ない成形用ポリエチレンテレフタレートを製造する方法を提供することを目的とする。本発明は、(1)イオン含有量が10ppm以下、酸価が30mgKOH/g以下であるビス(2-ヒドロキシエチル)テレフタレートと縮合させて平均重合度4~10のオリゴマーとする縮合工程、(2)該オリゴマーを熔融重合させて固有粘度0.50~0.65のプレポリマーとする熔融重合工程、および(3)該プレポリマーのペレットを結晶化させてから190~230°Cの温度で固相重合させ、固有粘度が0.65以上であるポリエチレンテレフタレートとする固相重合工程、からなる成形用ポリエチレンテレフタレートの製造方法およびかかる方法により得られる特定の性質を有する成形用ポリエチレンテレフタレートである。

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2004/014777

## A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl<sup>7</sup> C08G63/80, C08G63/183

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl<sup>7</sup> C08G63/00-63/91

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Jitsuyo Shinan Koho 1926-2004 Toroku Jitsuyo Shinan Koho 1994-2004

Kokai Jitsuyo Shinan Koho 1971-2004 Jitsuyo Shinan Toroku Koho 1996-2004

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 2002-47340 A (Mitsubishi Chemical Corp.), 12 February, 2002 (12.02.02), Claim 1; Par. Nos. [0015], [0041], [0042], [0049] (Family: none)	1-12

☐ Further documents are listed in the continuation of Box C.☐ See patent family annex.

\* Special categories of cited documents:

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"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&amp;" document member of the same patent family

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22 October, 2004 (22.10.04)

Date of mailing of the international search report

09 November, 2004 (09.11.04)

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Japanese Patent Office

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ATTACHMENT F